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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/604,836 | 06/27/2000 | Amnon Meyers | A-68807/AJT/JWC | 6540 |

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11/14/2003

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| EXAMINER |
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HARPER, V PAUL

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| ART UNIT | PAPER NUMBER |
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2654

DATE MAILED: 11/14/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/604,836

Applicant(s)

MEYERS, AMNON

Examiner

V. Paul Harper

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/09/02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The Examiner has considered the references listed in the Information Disclosure Statement dated 9/09/02. A copy of the Information Disclosure Statement is attached to this office action. Note: a copy of the Information Disclosure Statement submitted on 12/04/03 was included with the previous office action (dated 5/5/03).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. ("Acquisition of Semantic Patterns for Information Extraction from Corpora", Proceedings of the Conference on Artificial Intelligence for Applications, 1993, pp. 171-167), hereinafter referred to as Kim, in view of Soderland ("Learning Information Extraction Rules for Semi-structured and Free text,"

Regarding claim 1, Kim teaches a method for the acquisition of semantic patterns for information extraction from corpora, including the input of samples of text (p. 171, col. 2, ¶ 3, input text, and §'s 2.1 and 2.2), but Kim fails to specifically teach "providing a

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sample hierarchy, said sample hierarchy comprising samples of text.” However, the examiner contends that this concept was well known in the art, as taught by Soderland.

In the same field of endeavor, Solderland discloses the use of semi-structured text (§1.1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kim by specifically providing semi-structured text, as taught by Solderland, since this is an important class of text used for information extraction.

Kim further teaches:

- extracting at least one rule from said sample hierarchy, said rule describing how to process a portion of text (p. 171, col. 2, ¶3, extracts patterns, and §2.1 and 2.2);
- generating a pass from said rule, said pass containing instructions to operate a text analyzer (Fig. 2, §2.3); and
- constructing a text analyzer containing said pass (abstract, §1).

Regarding claim 2, Kim in view of Solderland teaches everything claimed, as applied above (see claim 1). In addition, Kim teaches “said rule is generalized into multiple rules and multiple passes” (Fig. 2, “generalizations”, §3, Step 5).

Regarding claim 3, Kim in view of Solderland teaches everything claimed, as applied above (see claim 1). In addition, Kim teaches "multiple passes are added to said text analyzer" (§1, patterns merged with the database).

Regarding claim 4, Kim in view of Solderland teaches everything claimed, as applied above (see claim 3). In addition, Kim teaches "multiple passes are arranged in a cascading manner having a sequence of passes such that rules associated with a pass are applied to subsequent passes" (Fig. 2, "merge into the knowledge base").

Regarding claim 5, Kim in view of Solderland teaches everything claimed, as applied above (see claim 1). In addition, Kim teaches "the samples are associated with offset values, said offset values identifying locations in a parse tree data structure, said parse tree containing concepts stored at locations identified by said offsets" (Fig. 2, "sample sentence" and "phrasal segmentation", §2.3, Fig. 1).

Regarding claim 6, Kim in view of Solderland teaches everything claimed, as applied above (see claim 4). In addition, Kim teaches "the step of allowing a user to control the extraction of rules from the sample hierarchy" (Fig. 2, "user", §2.3).

Regarding claim 7, Kim in view of Solderland teaches everything claimed, as applied above (see claim 5). In addition, Kim teaches "the step of allowing a user to designate properties associated with said rules, said properties controlling rule

generation for a portion of the sample hierarchy” (p. 171, col. 2, ¶3, last sentence, Fig. 2, “user”).

Regarding claim 8, Kim in view of Solderland teaches everything claimed, as applied above (see claim 5). In addition, Kim teaches “said concepts are retrieved from said parse tree and processed to form said rule” (Fig. 2, §2.3).

Regarding claim 9, Kim in view of Solderland teaches everything claimed, as applied above (see claim 6). In addition, Kim teaches “the step of allowing a user to designate attributes associated with said rules, said attributes guiding the application of said rules” (p. 171, col. 2, ¶3, last sentence, Fig. 2, “user”).

Regarding claim 10, Kim in view of Solderland teaches everything claimed, as applied above (see claim 1). In addition, Kim teaches that “multiple rules are generalized and merged into a single rule if there is a difference between the multiple rules” (Fig. 2, §2, Step 6, “Merging into the knowledge base”).

Regarding claim 11, Kim in view of Solderland teaches everything claimed, as applied above (see claim 10). In addition, Kim teaches “samples maybe contained in a sample file” (§1, “input text,” Fig. 2, “sample sentences”).

Regarding claims 12 and 13, these claims contain limitations similar to those given above and are rejected for the same reasons.

Response to Arguments

3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Citation of Pertinent Art

4. The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

- Soderland ("Learning Information Extraction Rules for Semi-structured and Free Text," Machine Learning, Vol. 34, 1999) teaches the generation of rules for information extraction from semi-structured and free text.

Conclusion

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to:

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Arlington, VA.

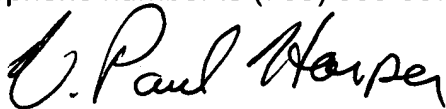
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Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. V. Paul Harper whose telephone number is (703) 305-4197. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645. The fax phone number for the Technology Center 2600 is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service office whose telephone number is (703) 306-0377.



VPH/vph
November 12, 2003



RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER